

EXECUTIVE SUMMARY

Department of Ecology's Toxic Reduction Engineer Efficiency (TREE) team worked with Basin Frozen Foods (BFF) to find ways to reduce their water usage. BFF is a manufacturer of frozen processed potatoes located in Warden, Washington. Several site visits were made to the BFF facility by members of the TREE team to observe the current process activities and to identify potential water reduction opportunities. The team focused primarily on the french fry production line and researched ways that BFF could reduce water use. This report presents the TREE team's evaluation of BFF's best opportunities for water use reduction.

The water reduction opportunities discussed in this report are divided into two sections; the quantifiable list and non-quantifiable list. Table 1 below, lists the quantifiable opportunity list. The total projected water savings from implementing the seven quantifiable opportunities are 192,300 gallons per day. This translates into approximately 46 million gallons per year or roughly 38% of the total water usage on the fry line. Basin Frozen Foods currently uses approximately 120 million gallons a year in their french fry line. The potential cost savings after implementation is approximately \$7780 per month or \$93,360 per year.

Table 1 -Water Reduction Opportunity Summary

Opportunity Name	Water Savings (gals/day)	Cost Savings (\$/day)
1. Eliminate Fluming Systems Overflow	149,000	\$302
2. Reuse Defrost Water	27,000	\$55
3. Reduce Water Flows in the Finish Washer	4,900	\$10
4. Install Low Flow Nozzles	3,300	\$7
5. Repair Peel Removal Pump	3,200	\$6
6. Repair French Fry Cutter Tubes	2,700	\$5
7. Train Employees	2,200	\$4
TOTAL:	192,300	\$389